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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/608,519   | 06/24/2003  | Rajen C. Dias        | 884.847US1          | 8726             |
| 21186  | 7590        | 08/03/2005           | EXAMINER            |                  |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.<br>P.O. BOX 2938<br>MINNEAPOLIS, MN 55402-0938 |             |                      | THOMPSON, GREGORY D |                  |
|  |             | ART UNIT             | PAPER NUMBER        |                  |
|  |             | 2835                 |                     |                  |

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                 |                  |   |
|------------------------------|---------------------------------|------------------|---|
| <b>Office Action Summary</b> | Application No.                 | Applicant(s)     | X |
|                              | 10/608,519                      | DIAS ET AL.      |   |
|                              | Examiner<br>Gregory D. Thompson | Art Unit<br>2835 |   |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 April 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11, 17-24 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3, 17, 24 and 36 is/are rejected.
- 7) Claim(s) 4-11, 18-23 and 37-40 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

1. Applicant's election without traverse of Group 1 claims 1-11,17-24 and new claims 36-40 in the reply filed on 4/25/05 is acknowledged.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Daszkowski. The apparatus is a unitary substantially uniformly transfer material, pad composed of a component transfer material of silver mesh 50 and a component carrier of elastomer 40 coupled (broad term) to mesh 50 in Fig. 7 coupled between a heat dissipating element 36 and heat source 34.
4. Claims 1-3 and 36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Deeney. The apparatus is a unitary substantially uniformly transfer material 26 composed of a component transfer material of silver mesh 26a and a component carrier material of coupling agent 26b coupled(broad term) to mesh 26a coupled between a die 24 and a heat dissipating element 28.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deeney in view of Nakashima. Deeney disclosed the die 24, transfer material 26a, carrier 26b coupled to the transfer material 26a and heat dissipation element 28 as discussed in paragraph 4 above. Deeney does not teach nor suggest a wireless transceiver coupled to the die 24. Nakashima discloses a wireless transceiver (system) with components inside. Therefore it is considered obvious to one of ordinary skill in the art at the time of the invention to use the component structure (die 24) which would have a circuit therein in a wireless transceiver taught by Nakashima as an electrical component electrically coupled to transceiver circuitry in the transceiver for operation thereof that is well cooled and will not breakdown under thermal cycling for prolonged life.

7. Claims 4-11, 18-23 and 37-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The cited art does not teach nor suggest a transfer material (mesh) that includes a plurality of elements distributed on a grid pattern, a plurality of similar geometric objects in a repeating pattern, irregular objects, a plurality of connecting elements to couple the similar objects to each other, array of solderable elements coupled to each other by a plurality of solderable connecting elements with respect to some of the claimed limitations in claims 4-11, 18-23 and 37-40; respectively.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Squitieri, Chiba et al, Edwards and Layton et al disclose a mesh material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory D. Thompson whose telephone number is (571) 272-2045. The examiner can normally be reached on Mon-Thru from 6:AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on (571) 272-2800ext, 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory D Thompson  
Primary Examiner  
Art Unit 2835

Gregory Thompson  
Primary Examiner

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